

REMARKS

Claims 16 and 17 stand rejected under 35 U.S.C. 112, second paragraph as being indefinite. Withdrawal of the rejection and allowance of the application are respectfully requested in view of the comments below.

The claims have been amended to more clearly describe the invention. In particular, Claim 16 has been amended to include an injector that combines the unused flatproofing material to the ground used flatproof pneumatic tires and a mixer that injects a mixture of at least one unused flatproofing material into the ground used flatproof pneumatic tires. Support for this amendment can be found at least at page 7, line 18 – page 8, line 2, in describing one exemplary embodiment of the invention: “The second structural component 2 is an injector/mixer and optionally includes a second or secondary grinder. The primary grinder 1 and the injector/mixer 2 are located such that the output material from the primary grinder 2 is collected and transferred to an input area 5 of the second structural component 2. The third main structural component 3 includes a mixer that mixes at least two reactive portions to form the virgin liquid rubber. The output of the mixer 3 is fed into the secondary structural component 2 where the virgin liquid rubber is mixed with the ground rubber.”

Claims 16 and 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Staten (U.S. Patent No. 1,097,824) and further in view of Ahmad (US 3,866,652). Withdrawal of the rejection and allowance of the application are respectfully requested in view of the comments below.

Staten is directed to a tubeless tire filled with a core of relatively large (i.e., “appreciable size”) solid tire particles of and adhesive material wherein the tire particles and adhesive material are assembled in a mold, vulcanized into a complete tire innard to which the tire casing is “forced into place under considerable pressure and by means of suitable clamps.” (see Staten col. 3, lines 34-36). Staten does not disclose or suggest a system for making a substantially filled tire with a mixture of core bits and a liquid virgin polyurethane. Ahmad discloses a system for filling a tire with a mixture of liquid and hollow spheres. In making this combination, hindsight has been improperly used to take the invention’s disclosure as a blueprint for piecing together references without evidence of such a suggestion, teaching or motivation to combine them. *In re*

Dembiczak, 50 USPQ2d 1614 (Fed. Cir. 1999); *Interconnect Planning Corp. v. Feil*, 227 USPQ 543, 547 (Fed. Cir. 1985); *In re Fritch*, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992); *In re Fine*, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988) (evidence of teaching or suggestion "essential" to avoid hindsight). While the evidence of a suggestion, teaching, or motivation to combine may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved (See, *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996)), it does not diminish the requirement that there be actual clear and particular evidence for the combination. *C.R. Bard, Inc. v. M3 Sys., Inc.*, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998). The office action provides nothing more than broad conclusory statements regarding the teaching of multiple references, which is legally insufficient evidence of a motivation to combine. *McElmurry v. Arkansas Power & Light Co.*, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993).

Additionally, even if combined, the combination of Staten and Ahmad does not arrive at the claimed invention because none of these references teach a system for making a tire substantially filled with a solution of core bits and liquid virgin polyurethane prior to curing or vulcanization. Specifically, Staten fails to describe at least a mixer that injects a mixture of at least one unused flatproofing material into the core bits, a pump for transferring the combination of core bits and unused flatproofing material from the mixer to a valve, an input device that inputs the combination into a tubed or tubeless pneumatic tire, and a pressure sensor attached to said input device. Ahmad does not remedy the defects of Staten or suggest the claimed invention. Specifically, Ahmad fails to teach or describe the modification to provide a grinder, an injector that combines unused flatproofing material to core bits, a mixer that injects a mixture of at least one unused flatproofing material into the core bits, a pump for transferring the combination of core bits and unused flatproofing material from the mixer to a valve, and an input device that inputs the combination into a tubed or tubeless pneumatic tire. Accordingly, withdrawal of this rejection is respectfully requested.

Claim 20 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Doan (U.S. Patent No. 4,970,043). Withdrawal of the rejection and allowance of the application are respectfully requested in view of the comments below.

Doan is directed to the creation of a stable moldable product which "is heated sufficiently to form a plasticized moldable material ... [which is] then molded by injecting the plasticized

material into a mold at a sufficiently high pressure to avoid significant localized cooling.” (see Doan col. 3, lines 11-20). Doan does not teach or describe a tire cavity filling system. Applicants agree with the Examiner that Doan fails to describe at least a grinding device. In addition to failing to teach or describe a grinding device, Doan also fails to teach or describe an elongated rotatable screw device that mixes core bits and liquid virgin polyurethane and then pressurizes and transfers the mixed material into the core of a tire where the rotatable screw device is disposed adjacent to said grinding device and has an input attached to an outlet of a grinding device.

Claim 20 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Murray (U.S. Patent No. 5,238,734). Withdrawal of the rejection and allowance of the application are respectfully requested in view of the comments below.

Murray is directed to a system for creating railroad ties not tires. (See e.g., “This British patent requires particular attention since it mentions in passing, the possibility of using the molded items as railroad ties, which is the subject matter of the current disclosure.” ‘734 Patent at col. 2 lines 15-19). The Applicants agree with the Examiner that Murray does not teach or describe a controller. Additionally, the apparatus of Murray fails to teach or disclose a tire cavity filling system with an elongated rotatable screw device that mixes core bits and a liquid virgin polyurethane and then pressurizes and transfers the mixed material into the core of a tire.

CONCLUSION

In view of the above remarks, withdrawal of the rejection and issuance of a Notice of Allowance is requested.

Respectfully submitted,

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